Office of
Alaska Road Commission
Nome, Alaska.

Letter and Trail File

G.E.E.
April 16th, 1908

Alaska Road Commission,
Skagway, Alaska.

Sirs:

I have the honor to report of the Winter Reconnaissance, Seward to Nome, just completed, under written and verbal instructions of Captain Pill bury, dated January 4th, 1908, as follows:

After having two basket sleds and 18 sets dog harness made and assembling provisions and camp outfit at Seattle, I sailed accompanied by Ross J. Kinney and three dogs purchased at Seattle, on S.S. Northwestern on Jan. 16th and reached Seward on Jan. 25th.

At Seward we spent five days in arranging equipment, "tyring out" dogs and repacking the outfit ready for the trip, and the party composed of myself Geo. E. Pulham, R. J. Kinney and Frank Jackson left Seward on Jan 31st.

Route:

The route traversed, briefly described was as follows:

The Alaska Central Railway was followed to its end at Mile 54, thence via Turnagain Arm, Glacier Creek, Crow Creek Pass, Eagle River, across country to Old Knik, across Knik Arm to New Knik, across country to Susitna Station, up the Susitna three miles, up the Yentna, Swentna and Happy Rivers, Pass Creek to Rainy Pass, down the Dalzell, Rohn and Kuskokwim Rivers to near the Tonzona across country to the mouth of the Tacptna at McGrath's, up the Tacotna and across country to the Tacotna Slough, over rolling hills to Gane Creek, down Gane and across country to Bphir Creek (the Innoko district) across country to Dishakaket and thence across country to the Kaiyuk Slough to the Yukon, and then up the Yukon to Kaltag, and by the Overland Mail Trail via Unalaklik to Nome.

I append a brief table of distances for comparison with the Valdez-Fairbanks route and it will be seen that the route as traversed to the Innoko District is 465 miles shorter than the Fairbanks route and to Nome is 343 miles shorter than the present used route. Also these distances may be decreased some 52 miles as will be shown on map and in more detail in this report, owing to certain cut-offs than can possibly be made.

Comparative table of distances to Nome.

Valdez-Nome Route		Seward-Nome Route	
Valdez to Fairbanks	354 Miles	Seward to Susitna Station	180 Miles
Fairbanks to Gibbon	275 "	Susitna Sta. to Rainy Pass	118 "
Gibbon to Kaltag	277 "	Rainy Pass to McGrath's	120 "
Kaltag to Unalaklik	90 "	McGrath's to Gane Creek	35 "
Unalaklik to NOME	222 "	Gane Creek to Kaltag	110 "
		Kaltag to Nome	312 "
Totals	1218 "		875 "
Valdez to Gane Creek	929 "	Seward to Gane Creek	464 "
	Difference 465 miles.		

As I have never been over the Valdez-Fairbanks Trail in Winter, (but was over the summer trail in 1904, Valdez to Clear Creek near Upper Tanana Crossing) I am unable to describe the route by comparison, but Rainy Pass, while some 675 feet higher in altitude than Thompson Pass, has 118 mile water grade to it to gain an altitude of 3175 feet and a descent on the West side 1735 feet in 9 miles down to the mouth of Dalzell River. Other than this the route is

very much like the Copper River Route and would be in timber practically all the way, with the exception of 12 miles over Rainy Pass..However a great deal of work must be done on the route to make it practicable for winter mail service as it would be im-practicable to follow the broad open River flood plains and valleys as was done by this expedition, on account of overflows and open water which would render the trail, impracticable except at the season of the winter when this expedition came through.

Briefly the route is entirely practicable, depending largely upon the completion and operation of the Alaska Central Railway, the opening up of the Susitna, Yentna and Kuskokwim and Innoko Districts, and by comparison with the Fairbanks route as I understand it, there are no real obstacles to overcome, with the exception of Crow Creek Pass and possibly this part of the route can be overcome by going via Indian Pass or even the entire distance around the shores of Turnagain Arm and Knik Arm to Cook Inlet.

Rainy Pass is so easy of ascent that there is no question in my mind of its feasibility. Here I might say we were in timber the entire way to Kaltag except for 7 miles approaching and 5 miles leaving Rainy Pass.

Timber line was found to be at altitude 2250 feet on each side of the pass but much brush and willows extended right up to the summit.

To more minutely describe the route followed: We had some difficulty in getting our heavy loads over the many narrow bridges on the Alsska Central Railway as they were covered withfrom 4 to 7 feet of soft, heavy snow and a narrow trail had been kept broken through the center of the bridges down to the ties. The snow, on account of the width between the ties had been stamped through by the mail carrier and occasional travelers and the accumulating snow had become mushroomed over and built up perpendicular walls 4 to 7 ft. high until it lopped over or hung outmbeyond the ends of the ties from 1 to 3 ft.

We could not keep to the narrow trail in the center as it was nearly or completely covered over on top, so we had to resort to going on top of the snow to one side and out over the ends of the ties in many instances, but fortunately the weather was cold enough to congeal the snow and keep it from shearing, else we could not have hauled the heavy loads over the bridges. This condition will result each winter until the bridges are fully tied or the road operated, as the space between the ties will not allow the snow to pack solid. Also these bridges cannot well be avoided.

Through the half dozed tunnels we found the mouth of them almost completely blockaded with snow slides and we had to shovel our way into and out of them, bodily lift the heavily loaded sleds over the slides into them and "snub" down into them. With no snow through the several tunnels it would be impracticable to haul heavy loads through them, but I could not well see how they can be avoided as the River beneath is too rough and open to be traversed and this is in a bad snow slide country. Much ice hung from the roofs of the tunnels like stalyctites and with the heavy rails, rocks and occasional ice on the floor made trecherous traveling in the darkness.

Between two of the tunnels we found and unfinished bridge, so we improvised a floor on which to cross and between two other tunnels for some 500 feet we had to cut a trail along the shear(sheer) mountainside, through glaciered ice and snow and move the sleds and loads by hand.

We left the track at mile 54 and made down the open flood plain of Glacier River to Turnagain Arm at mile 61. From mile 63 to 75 we found much difficulty from the extremely high tides, rough hummocky floe ice and uncompleted roadbed. At mile 65 to 67 the railway company has a trestle some two miles long and out some 200 to 500 feet from the cliffs and shore to avoid glaciers and snow slides, and even when the roadbed is completed and being operated I doubt the ability to handle sleds along here, but at the limited time at hand to examine conditions I was unable to form an opinion of the solution, as the

tide water and rough ice must always be dangerous or not treversable. At mile 69 we had to leave sleds and loads out on the ice one night and from mile 67 to 74 it was succession of climbing over the hills and along the tide lands along the cleared right of way and but slow time could be made.

Up Glacier Creek from mile 75 to 85 we had no difficulty as a sled road was being operated to Girdwood at mile 82, but over Crow Creek Pass it would be out of the question to handle Nome mail with an ascent of 45 degrees for the last 1500 feet and to an altitude of 3550 feet and then down nearly as steep some places to Raven Creek and on down to Eagle River 9 miles below.

An alternative route should be examined from the mouth of Glacier Creek and continuing along the right-of-way of the railway to Indian Pass where it is said a good grade and Pass can be gotten and all the way in timber. This is some 20 miles west of Crow Creek Pass, but we did not go that way on account of no trail, lack of time and uncertainty of getting through.

The location of the Alaska Central Railway however follows around the entire north shore of Turnagain Arm and the East Shore of Knik Arm, and when this road shall have been completed, would, very likely be the route if the mail for Nome ever goes via the Kuskokwim, but there would always be trouble and danger from snow slides, and the roadway and cuts be blown full of snow and mush rough and sidling trail result.

Also some difficulty was encountered all the way down Raven Creek and Eagle River and across to Old Knik on account of no trail and very deep, soft snow and open creeks From Eagle River we caught on to an Alaska Central Ry., pack trail across lakes and hills to Knik Arm and arrived at Old Knik at 9 PM long after dark...From here to New Knik we had no difficulty as the snow was now but about a foot deep and the Indians had a trail.

At New Knik, Mr. Pulham, in charge of transportation, decided to leave one of the basket sleds and all the double harness, as he deemed the country too crooked and snow too deep and soft to pull the wide sleds through, and with dogs harnessed two abreast, so a day was spent in making long tugged harness, arranging four Yukon Sleds, buying provisions and remodeling the outfit. In my mind it was a mistake to discard the sleds and double harness as we had already passed over all the worst of the trail and were now just where we could use the rig to advantage and fair time had been made up to here with no accident or breakage and from information I had been able to get as to conditions ahead, we were now beginning to get into fair going and the entire trip could have been made as successfully or to more advantage with the original outfit, but no so heavily loaded and with two Yukon Sleds (tandem) extra, to relieve the excessive loads on the basket sleds.

From New Knik to Susitna Station we passed through rolling hills and Tamarack swamps and arrived at the Station on Feb. 15th.

Here a three-quarter blood Cree Indian was hired to go through as far as McGrath's and then return, and we took on flour, sugar, bacon and other supplies as had been arranged for previously, and the real trip began as this was our last base of supplies.

From here I began the reconnoissance "pacing" the distance clear through to Kaltag. This was done by counting 'fours' as is done by the Geological Survey, in determining (roughly) distances and consists of counting only one foot for four times and calling it ONE. I occasionally measured the sum of these 8 steps on snow shoes or without, as the case may be, and then using the multiple in determining the distance traveled.

Also latitude observations were taken as will be seen on map and the magnetic variation determined, but these could not always be gotten at or near the fifty mile station owing to the stormy or hazy weather. By closely watching the U.S.G.S. Reconnoissance map of Mount McKinley region, 1904: Spurr and Post's exploration of 1898 1898: and Lieut. Herron's exploration in 1899, I was

able to estimate and check their distances, topography and delineation clear through to Farewell Mountain on the Kuskokwim, but will say from there to Kaltag the maps are entirely in error and it would be impossible to map the country except by more extended surveys than it was possible for me to make on such an expedition.

From Susitna Station we of course followed up the broad flood plane of the rivers, taking angles with prismatic compass and going from point to point of the river bends, and I found the maps to be very accurate in the main, but of such small scale that certain small canons, islands, sloughs and topography, do not show, and of these I will tell later.

In my opinion it would be impracticable to follow the broad open flood plain all winter on account of overflows, and the opening of a trail by this route virtually means the cutting of five hundred and fifty-three miles, more or less, of trail through the timber and brush, and certain necessary crossings of the rivers.

At intervals all up the Yentna and Skwentna we passed through sloughs or up the main river as the case may be, and had very deep soft snow to contend with and had to snow shoe all the way.

A cut off route from Susitna Station about north forty-five degrees west, and arriving at the Skwentna at about the mouth of the Talushulitna River, should be exploited. This is said to be traveled by Indians but I could get no information on it.

Upon arriving at the mouth of the Happy River in a strong wind, on the afternoon of Feb. 26th, a halt was made, but from the topography of the country, (we were on the south side of the skwentna) it did not seem that the Happy, with so large a drainage area, could come out of the mountains through so small a canon, so while the river was anticipated at the exact distance traveled, I concluded from the topography of the hills that it must come in two miles or more above, so we soon camped four miles above the Happy, and with the low hills on the right leading me to believe that we must come to it at any turn. On the next morning, Feb. 27th, after traveling three miles we arrived at the mouth of Portage Creek (I had seena pichure of this place in one of the Geological reports) so we turned back the seven miles and entered Happy River, having lost a days travel.

Here we blazed trees and put up a sign giving name of the river, party and distances back to the mouth of Skwentna and Yentna, to Susitna Station and Seward. In fact, on the entire trip, at our camping places I blazed trees giving date, distances, etc.

In the Happy River we found much open water and very deep soft snow which had been blown down into the valley, but fair time was made each day.

This is a very narrow river between steep sloping side-hills from plateaus above, almost a canon for 16 miles, where it broadens out somewhat at mile 282, but always going up on rather stiff grades. A trail through here must lie through the creek bottom cutting across the many small bends covered with spruce and cottonwood. It is a veritable paradise for moose and on the 28th of February, while some distance ahead of the party I killed a big, bull moose.

For the success of the trip we figured on a moose or plenty of ptarmigan. From this time on we were heavily loaded as the moose dressed probably 650 lbs, and but for it we must have been on short rations toward the end of trip.

Also we saw three different outfits of prospectors camped along the Happy and who had two to four moose each hanging up. We saw, however, but about 80 ptarmigan on the entire trip and only had four of them, these were all near timber line.

On up the Happy I saw the country as mapped and by closely following the maps we went over the summit of Rainy Pass on March the second at noon, a perfectly clear, calm day, and dropped down Dalzell into the timber.

However, when one arrived at timber line on Pass Creek, there might be a question as to the proper route ahead as the Ptarmigan Valley route looks

the much more likely pass thrpugh the mountains,while the Pass Creek route turns into a high mountain and around toward the north in such a way that from a distance it seems to terminate too soon,but by very closely watching the map one can readily decide.

We went up the long smooth ridge between Pass Creek and the main Happy, as the creek bottom was filled with very deep soft snow among the brush,and this ridge would be the ideal location for a trail,but must be permanently staked.In fact the twelve miles between timber must be staken when a winter trail is established.

Down the head waters of the Dalzell I saw how one could easily get lost (at least temporarily) if coming up stream, as the canons are so deceptive and the country so big. While here I will say that Rainy Pass is so easy of ascent and descent and is so near on a direct line of the route that I did not stop to examine any of the other passes i.e. Simpson Pass some ten miles northeast,and Ptarmigan Valley some 20 miles southwest,as either of the other routes would be much longer and not to be considered,unless some serious obstructions should be found before reaching the Kuskokwim.

However there is a very bad stretch of country from mile 302 to 306 down the Dalzell,where the creek is narrow and confined in a succession of deep narrow canons,glaciers and land-slides and the creek has a very rapid descent at places. This,however, can be overcome by laying a trail well up on the mesas to the north,overlooking the creek and through the timber but much study will be required to pick out the best route for several miles of this creek. Other than this the Dalzell is easy.

Arriving at Rohn River we find a broad flood plain of from 1500 to 2800 feet wide and this must be a long large river.Down stream it abruptly turns several bluffs and from the open country at its mouth it was difficult its exact confluence with the Kuskokwim,to determine.

Here on March 3rd we met two men names Powell and Ramar bound for Seward for medical treatment for Powell's thumb,so we gave them acticeptic(anti) tablets and they were very glad to see us,as it meant they would have our trail to follow clear back to Susitna Station. They had left McGrath's on Feb.21st and had unfortunately followed a trapper's trail and only came out on the Kuskokwim at Farewell Mountain,having been practically lost for 12 days,though one of them had been out to Seward before.

On Rohn River we ran onto glare ice which continued for forty nine miles or down to about the mouth of the Dilinger River. Over this stretch I had to abandon the "pacing" for the time being, as the sleds ran so fast before the wind.Without creepers it was impossible to even stand up on the ice with a six mile an hour wind down stream,so we all rode and I timed and estimated the distance. Indeed this was a dangerous part of the trip as the ice was so smooth and the wind so strong that the sleds were broadside on or ahead of the dogs much of the time and the many snags sticking through the ice caused us many "tip overs" but no serious accident or breakage. At night we improvised brakes for the sleds and creepers for ourselves and next day made great time until we ran off the glare ice into snow and overflows.

From Farewell Mountain the Kuskokwim is, generally speaking,properly mapped as far as the Tonzona,but while I took compass courses and paced the distances from point to point, the river flood plain is so broad and full of so many islands ans sloughs that it would be fallacy for me to try to map and plat the country from such notes and under such conditions as I could get them in mushing along on snow shoes at about 12 miles a day.

Several rivers were seen to enter from the southwest but which are not on the maps,and we did not see the Dilinger River at all. We could not find the Tonzona River but found Chief Nicholi and two women at the point where the Tonzona should enter,but could not make him understand,although he was rather an intelligent native. We got him to pilot us across the low,swampy tamarack and unmarked country,20 miles to Nicholomas,on the Kuskokwim opposite the mouth of Big River and here I got information from a man named Wilson as

to the rest of the distance to McGrath's at the mouth of the Tocotna. At Nicholomas the Big River enters from the south, and is, as its name infers, a big river,nearly as large as the Kuskokwim.This river has natives up its several branches and I roughly delineate it on the map. It is said to emanate some distance south of Farewell Mountain in lakes and sloughs. From Nicholomas we travelled over the trail just traversed by Wilson on snow shoes,and were part of the time on the river,through sloughs,lakes,tamarack and spruce swamps and it was impossible to carry a compass line,but when out in the open we were at all times going directly away from Mt.McKinley and directly toward Mount Tacotna(not on any map).

After a day at McGrath's we left Johnson(the ¾ Cree Indian) who was sick with pleurisy, and took the sled trail from Kaltag by way of Gane and Ophir Creeks. Here is the most crooked,up and down hill,round about trail one could imagine, so crooked that a compass line could not be carried through the scrub timber and brush,so I confined myself to measuring its length and taking such bearings to mountains and peaks, and such notes as to general direction and condition,as time would permit. From my observations for latitude I am able to delineate the trail and location of Gane and Ophir Creeks.

At Portage City there is a block house built many years ago by Russians,and there is said to be a cut off from here to Gane Creek used by the Indians.

At the head of Gane Creek, mile 450,there is a summit 1780 feet in altitude,which is very steep for the last thousand feet indistance or 400 feet of climb on the Big Creek side,but as a trail would probably find a better route into the Innko District,probably by Portage City,this is not considered a detriment to the route.

At the Tocotna slough,we found about a dozen men, cabins and many caches. This is where they land freight by poling boat up the Tocotna River to McGrath's.

At Moore City(Gane Creek) we found fine, well-built cabins,but all deserted for the new diggings at Ophir Creek,twelve miles away by trail. We stayed here over night with U.S.Commissioner W.A.Vinal,and I was given much information about the country and I include a copy of a sketch of the country made by him.

Next day we went to Ophir Creek(Gerde), the new diggings discovered about Feb.20th,1908, where we stayed over night and here we found the people all excited over the new find. All were putting up log cabins and getting ready to mine,but the camp was completely out of provisions and the few dog teams were busy hauling flour and sugar from McGrath's and provisions and clothing from Kaltag and even from StMichael's. In fact we met one outfit of five Indian teams nearing "Gerde" with provisions and clothing from St.Michael.

There seem to be about 200 persons in the whole Innoko District and probably as many more had left the country some few weeks to months before more on account of a lack of provisions than anything else.

The Innoko District is said to very much resemble the Dawson Country, physically at least,with its timber and rolling hills. As wewere only at the two head-quarters camps over night, I of course had no opportunity to see any of their workings, in fact little work had or could be done on account of the food supply but all were enthusiastic and expected a big rush upon the opening of navigation.

Here I figured on a cut-off across country directly to Kaltag,estimated by me to be some 100 miles and said to be 150 by trail,but as out provisions and time were getting short I decided best to follow the beaten path,which goes in a very round about way via Dishaket.

The distance from McGrath's to Gane is said to be sixty-five miles,found to be thirty-five, and from Gane to Kaltag 150 miles, found to be 109 miles.

I At McGrath's,46 miles away, damaged flour was selling for $12.00 per hundred and sugar at forty cents per pound,with only two tons of flour and 1800 lbs sugar and no other commodity to be had.

At Moore City,prices ranged as follows: flour $35.00 per hundred,sugar 50¢ per lb,beans 50¢ per lb., dried fruits 55¢ per lb. All canned goods at $1.00 per can.However, none of the latter were to be had and the limited food supply was contained in individual outfits. The country is devpid of game, although the indians occasionally get caribou some miles away which sells for 60¢ per lb. Winter freight rates to Gane and Ophir Creeks were as follows:

From Kaltag	50¢ per lb	to Gane 110 miles:	to Bphir 99 miles
From McGrath's	15 & 18¢"	to Gane 35 miles:	to Ophir 46 "
From Anvik	40¢ per lb.	to Gane 130 "	to Ophir 119 "

Yukon River natives were being paid $50.00 and food,per round trip,St.Michael to Innko, with basket sled loads of say 400 lbs.,in caravans of several dog teams,but they made slow time.

Leaving Ophir Creek the used trail continues very crooked and over rolling hills down the left limit of the Innoko,crossing many streams, the largest being the Ditna and with prospectors cabins every few miles.

In forty miles we arrived at Dishakaket,an Indian Village on Shagaluk Slough(to the Yukon) and are told that it is 86 miles to Kaltag,but which I find to be but 59 miles.

Here are some 100 or more natives and some dozem white people,with two stores, a saloon and a roadhouse. This was thought to be the head of navigation,but later boats have been up the Innoko and Ditna to Hanes Ldg., said to be forty miles from Gane Creek,and the Commission will probably later on receive a petition for a summer road or trail from Gane or Ophir Creek to this landing.

The Innoko District is so isolated from direct or quick transportation, on account of the crookedness of the river and sloughs and their great length, that it is diffcult to get supplies in during the navigation under present conditions,and surely if the new diggings prove all that is expected of them, there will be a demand for a road or trail from some conveneient point,either on the Kuskokwim or Yukon or head of navigation on the Innoko.

However the country is so erroneously mapped,is so cut up by the crooked rivers and is so rolling,that I am unable to deli-neate it except in a very crude way. Mr. Vinal gave me a very crude,pencilled map of the country which I will copy and include with this. Among those who could talk intelligently of the country,none could or would try to map it.

From Dishakaket we follow the very crooked trail through rolling,swampy, sparsely timbered country to the Kaiyuh Slough where there is a roadhouse. This place is some three miles up the river and up the slough,and is said to be 18 miles from Kaltag.This I found to be about 14.5 miles while the Alaska map shows it to be by scale 24 miles.

We arrived at Kaltag on March 19th,where we had the coldest weather of the entire trip,it being 43 degrees below zero.Here we waited for telegrams, rested the dogs and arranged to go with the mail carriers as the weather was bad and trails obliterated.

Observations were taken on Polaris at western elongation about every 50 miles,as requested, and this data together with magnetic declination shows on map.

Snow conditions:

From Seward to Old Knik the snow was from three to seven feet deep,and soft,depending largely on altitude.

From Old Knik to New Knik, 1-½ to 2 feet.

From New Knik to Shisitna Station 2 to 4 feet.(Shisitna so spelled)

Snow Conditions:(Cont)
From Shusitna to mouth Happy, 4 to 6 feet.
From Happy(mouth) to summit Rainy Pass,6 to 8 feet,caused by the snow being blown down into the valleys,and it was usually hard.
From Rainy Pass to mouth Dalzell River,8 feet,gradually diminishing to 2 feet and usually hard.
From mouth Rohn River to Kaltag about 2 to 3 feet and soft.

Winter travel conditions;
We found the travel conditions generally very bad with the exception of the stretch from Old to New Knik;20 miles; from mouth Pass Creek to timber on the Dalzel,12 miles, and from mouth of Dalzell to 39 miles down the Kuskokwim,total 74 miles, and we had to snow shoe practically all the way to McGrath's,418 miles,with these exceptions.

It would take infinitely more travel than is in sight at present to break a fast or feasible trail over the route, even were a trail cut through the timber the entire distance,and unless the new Innoko District shows up well or some big strike is made along the route,it would be entirely impracticable to send Nome mail by this route,as roadhouses would have to be built and maintained and the entire route is entirely too far from the line of travel under present conditions.However, many of the disappointed ones from the Innoko District came out this way during the early winter and possibly 20 men travelled the route to Seward,but their trips were fraught with hardships and lack of food,game and civilization, and several men arrived t Shusitna Station in bad condition after resorting to "Siwashing it" which eans they travelled without blankets or tent for 24 to 35 days in the dead f winter.

Of the Prospects,Number,Location and extent:

But little could be learned or seen and evidently the country is not attracting much attention owing to its remoteness and inaccessibility.

At Shusitna Station we met four men who had just come down the Shusitna from the new diggings at Valdez Creek,for supplies, and they spoke very favorably of the district,but reported that there was no good cause for a stampede as only one really good claim was being worked.

Shusitna Station is the tidewater outfitting point for this large area as supplies are landed from Cook Inlet points in open season and cannot,with justification be hauled from Seward. The mining and prospecting is very meagre and probably not more than 100 men make Shusitna Station the outfitting point.

At Kahiltna some six men are prospecting at Lake Creek and five miles up stream a like number. We saw probably 20 men,all told, freighting their outfits to Kahiltna,Lake Creek,Yentna,Canon Creek and other points, and three different parties composed of nine men bound for over the range to the headwaters of the Kuskokwim,but all were camping,killing moose and waiting for more favorable travel conditions,and had been camping in one place from 2 to 4 weeks.

We saw but two families of Indians after leaving Shusitna Station and they were at Nicholis and Nicholomas.

Some prospecting is being done up Big River and one party is "swamping" a trail from about 10 miles east of McGraths up to his quartz prospects on Big River.

At McGraths probably a dozen men rendezvous,but most all devote their time to trapping and hunting. This is a trading post and is headquarters of the U.S.Commissioner for this District.

At Tacotna slough quartz prospects were reported and probably 15 men stay here,but nothing of moment has been struck as yet.

Many Caches and here men brought provisions and outfits by poling boat from McGraths,bound for Gane Creek.

At Gane Creek all had stampeded a few days before for Ophir Creek, [illegible]ept-

-ing the U.S.Commissioner and his wife,and the many fine cabins along the creek were deserted,at least temporarily.

Gane Creek had some 450 men on it during the last season,but about 250 quit the country from lack of provisions or favorable prospects,and the balance went to Ophir Creek.

The coutput has been very small for the amount of work done, holes sunk and money spent,but I could get no figures or estimates as to what has been taken out.

As Ophir Creek is yet in its infancy,none can say what it will be,but reports since I came through there are none too encouraging, and while some 40 men have recently left Nome for the new diggings,many of them have turned back I am told.

Of the work done in detail:

I will say that the route is entirely feasible from Knik to Kaltag,but depending on the completion of the Alaska Central Railway to or near Old Knik. It is not feasible to traverse their bridges,tunnels nor along Turnagain Arm in the present state nor over Crow Creek Pass,but if they extend along Turnagain Arm and a route can be gotten over Indian Pass,or some other pass near at hand,it is entirely feasible to put in a mail route over the rest of the distance traveesed.

From Seward well up to the Skwentna River the snow conditions are very bad for travel,the snow being wet,heavy and deep caused by proximity to tide water.

Timber:

From Old Knik to New Knik the timber is largely birch of large size and medium spruce with some cottonwood.

From New Knik to Shusitna Station,it is tamarack,spruce and hemlock.

From Shusitna Sta. to Happy River is scattering birch,medium sized spruce and hemlock and cotton wood or willows,solid.

From mouth of Happy River xxxxxxxxxx to timber line is spruce and hemlock with willows and cotton wood on the river bars.

From timber line donw Dalzell River to Rohn River is solid spruce of medium size.

From the mouth of Rohn River to Nichilis is solis spruce,but with cottonwoods and willows along the river banks and islands.

From Nicholis to McGraths is tamarack and patches of birch and spruce, and willows along the river.

From Farewell Mountain to McGraths is 70 miles unknown,but is undoubtedly solid spruce and tamarack.

From McGrathes to Kaltag is small spruce and tamarack(mattering) and willows.

Pictures:

I enclose 35 pictures taken along the route which will show some of the country and conditions. Many pictures I would like to have taken were not gotten on account of lack of light,or stromy weather or light from wrong direction and some did not turn out well,but these will suffice.

The table of distances I got up for my own convenience,but I attach it herewith as it may be of use.

The table of data referring to the trip is comprehensive,I believe.

Kaltag - Unalaklik Trail:

On the 22nd o March we parted company with Pulham and Jackson at Kaltag and went along with the mail carrier and made to the 22nd mile cabin.

This part of the trail is quite crooked and through small timber and brush, over rolling hills and across many small creeks. As the weather was snowy and bad but little could be seen of the surrounding country, but the trail should be materially straightened and more thoroughly cut through the timber and brush and the open places permanently staked, as any but the mail carrier would have difficulty in following the trail in bad weather.

On the 23rd we made 28 miles to Old Woman Mountain Telegraph Station. This also is over rolling hills, sparsely timbered country and the trail quite difficult to follow. The open stretches should be permanently staked and the trail straightened out as there is much wind-swept country.

On the 24th we made 40 miles to Unalaklik and this part especially needs attention. The telegraph line is close at hand and could be followed in case of storm, but it is not practicable to follow it with loaded sleds and many men have suffered hardships and been lost in storms on this portion of the portage. As to what is needed in the line of bridges and culverts, I was unable to see as the trail was very good and covered with deep snow at the time we came over it, but there are many small creeks to cross and the open stretches should be permanently staked in the fall of the year. On the Unalaklik River many short portages are made across bends of the river and to one not acquainted with the trail much difficulty must be met in finding the portages as they are not marked and are not visible in traveling down the river. The mail carriers and their dogs know the trail thoroughly, but not so with the traveler, and to follow the great bends of the river means much loss of time with greater distance to travel. The river is finally left at the Reindeer Station some six miles from Unalaklik and from here the trail goes across the open tundra. In stormy weather this is the worst stretch and should be permanently staked. The open sloughs or lagoons lying along the foot hill are a constant source of trouble, and in coming in to Unalaklik we spent some hours and had to go well to the west and toward Egowic and came out on to the Nome - Unalaklik trail about 4 miles west of Unalaklik, and got in well after dark.

The signal corps has a crew of natives out on the telegraph line cutting two extra guy poles to go at each pole.

The improvement of this trail can best be done in the fall of the year just before the freeze-up, and the line should be picked out in the open season in company with someone familiar with the route, preferably one of the mail carriers or Harry Lawrence, of Atchison & Lawrence, of Kaltag.

Timber for bridges, culverts and trail markers is at hand, and probably 30 miles of the 90 miles is through sparse timber or brush, the other 60 miles being across open wind swept tundra, or swampy ground.

There are no bad side hills at any place on the route, but several steep pitches onto and off of the rivers, and these should be cut down and the place of leaving the river plainly marked.

Overland Mail Trail, Nome - Unalaklik.

Of the overland mail trail which was improved last season, I will say: That portion from Unalaklik to Nome has been well done and is well staked, but parts of the staking is not followed, as the old used trail, while very crooked, has all the big hummocks and nigger heads worn down smooth, so the mail carriers and natives follow the old trail, though the stakes are near at hand on one side or the other, and could be followed in case of storm.

From Egowic to 12 miles southeast of Skaktolik I did not follow or see the trail as cut by us high up on the hills and over the cliffs, but I understand it is good for the use intended, i.e. when the Ocean Route cannot be travelled. From Skaktolik to Bonanza, 18 miles, the trail has been well staked

this past winter,but it should be permanently staked in summer time,as there is about a mile of timber that should be cut through,and thus avoid some o- verflows.

Brom Bonanza to Isaacs Point and along Norton Bay to some 8 miles west of Moses Point,and also across Golovin Bay,the trail has been well staked this season and has come in in good stead as I am told by mail carriers that on every trip across Norton Bay,they have had bilzzards this winter.

The work done last summer on the trail from Koyuktalik to Walla Walla I did not pass over as the trail was good on the ocean,but with the improvements made on it at Walla Walla the past winter(and which I could see from a distance) it now answers the purpose for which intended,i.e. for use of the mails and public at such times as it is impossible to travel on the ocean,and I do not see how any improvement can be made to it without going very high up on the ridges or back of Haystack Mountain and down Quik River. No amount of grading in its present location would help the side hills as the side cutting would be blown full of snow and rendered useless,so it remains for a survey of the route to determine just what is best to do on these parts of the Overland Mail Trail. There are peculiar conditions of topography,Ocean and travel along this part of the route and it seems to me that there must always be trouble and delays along this stretch,until a land trail is cut back of Haystack Mountain.However, this gets away from the coast and where I doubt if the trail would be ~~travelled~~ except when it was absolutely impossible to get along the coast as so much better time can be made on the ocean.

The trail staking from Walla Walla over the hills to Golovin Bay is splendid and cannot be improved upon.

The trail over the hills from Golovin Bay to Cherokuk,4 miles, and over Topkok Hill,3 miles, should be permanently staked,and directly where the trail now goes,the hummocks and nigger heads worn down,with no view to a perfectly straight trail however.

Also from Bluff to O'Brien's Cabin,8 miles should be staked on top of the hills.

Trusting this is in detail in keeping with the requirements.

Very respectfully,
Signed- W.L.Goodwin,
Eng'r.in Charge,
Sup't.Nome District,A.R.C.

Resumé tabulated data,winter reconnaissance,Seward to Nome
January 31st to April 5th,1908.

Seward - Kaltag		
Days consumed to Kaltag-----	49	
Days lost account weather	6	
Days actual travel-------	43	
Miles traveled----------	563	08
Average miles per day----	13	09

Seward - Nome.		
Days consumed to Nome-----	66	
Days lost account weather	12	
Days actual travel-------	54	
Miles traveled----------	875	08
Average miles per day----	16	20

List of Pictures taken en route.

Mile 41,Alaska Central Ry.,looking back toward Seward.Piles of rail and flat car covered with about 4 feet of snow.
Lakes and Tamarack swamps between New Knik and Shusitna Station.
Do.
Do.
Do.
Miners cabins at the mouth of the Kahiltna.
Miners cabins at Lake Creek.
Cottonwood and spruce groves along lower Skwentna River.
Spruce and birch hills along upper Skwentna.
Do.
Do.
Looking up Skwentna from 10 miles beloww Happy River.Base of McKinley Range in background.
At mouth of Portage Creek.
An abrupt turnn in Happy River.(See sketch on back)
Moose wounded and helpless in deep snow up Happy River.
Do.
Moose, with Jackson,Pulham,Goodwin and Johnson.
Moose being cut up.
Do.
Upper Happy River with Mt.Distin in background.
At mouth Moose Creek looking west.
2 miles above mouth Moose Creek looking N.W.
Do.
On Ridge 3 miles above mouth Pass Creek looking East.
Do.
Looking down Pass Creek 4 miles east of Summit.
Do.
28-a Looking down Dalzell from Summit Rainy Pass.
Looking at right angles and north from Summit.
Lunch on the Kuskokwim,lloking down stream at mile 365
Nicholis Indian Village(Meeting house in center)
Do.
Nic holi with 2 squaws,Jackosn,Johnson and Kinney.
NickOlomas,opposite mouth of Big River.
U.S.Com'rs house and the jail at Moore City(Gane Creek)
Evenings occupation in camp.(Party)

Revised Distance Table
Valdez-------to-----Fairbanks.

From Valdez to	Camp Comfort	10.1
	No.Telegraph Station(Vacant)	13.0
	Wortman's R.H. & Tel.Sta.	19.3
	Summit R.H.(Vacant)	26.6
	Ptarmigan Drop R.H.	34.3
	Saina Tel.Sta. (Vacant)	36.5
	Beaver Dam R.H. & Tel.Sta.	45.4
	Teikhell R.H.	54.5
	Teikhell Tel.Sta.	59.5
	Tacoma R.H.(Vacant)	60.5
	Ernestine R.H.(Vacant)	65.2
	Glacier R.H.(Vacant)	74.6
	Tonsina R.H.	82.7
	Willow Creek R.H.	95.0
	Copper Center	105.7
	Tazlina R.H.	113.7
	Simpson's R.H.	115.9
	Dry Creek R.H.	124.8
	Gulkana R.H. & P.O.	131.9
	Poplar Grove R.H.	143.5
	Sour Dough R.H.	153.5
	Old Home R.H.	169.5
	Meir's R.H.	179.5
	Paxon's R.H.	195.3
	U.S.Signal Corps Relief Cabin	205.9
	Yost's R.H.(McCallum Tel.Sta.)	215.5
	Casey's Cache (destroyed)	225.5
	Miller's R.H.	227.5
	Rapids R.H.	240.7
	Donnelly's Tel.Sta.	252.5
	Donnelly's R.H.	253.1
	Beale's Cache	270.5
	McCarthy's R.H.	289.1
	Shaw Creek R.H.	301.3
	Cyclone R.H.	307.0
	Richardson	310.2
	Lake Road House	322.0
	Overland R.H.	330.7
	Munson's Road House	340.0
	Clark's R.H.(Vacant)	341.3
	Salche Tel.Sta.	347.4
	Pile Driver R.H.	351.8
	Twenty Mile R.H.	361.0
	Johnson's R.H.	364.0
	FAIRBANKS	379.5
	(Willow Creek to Chitina)	39.3

Revised Distance Table
Seward-----to------Iditarod.

From Seward to	Kern Creek	72 Miles
	Glacier Creek Road House	74
	Crow Creek Mining Co.	81
	Raven Creek Road House	92
	Eagle River R.H.	110
	Old Knik R.H.	127
	New Knik(Settlement)	145
	Little Susitna R.H.	167
	Susitna (Settlement)	181
	Alexander Creek R.H.	189
	Lake View R.H.	199
	Skwentna R.H.	219
	Half Way R.H.	240
	Mouth Happy River R.H.	260
	Road House	264
	Road House	275
	Pass Creek R.H.	289
	Summit R.Pass (R.H.)	297
	Rainy Pass R.H.	302
	Rohn River R.H.	311
	Farewell Mt.R.H.	330
	Peluk Creek R.H.	350
	Sullivan Creek R.H.	358
	Bear Creek R.H.	367
	Salmon Creek R.H.	371
	Big River (Berry's) R.H.	387
	Crooked Creek R.H.	392
	Northern Com.Co. Trading Sta.	410
	Kuskokwim Com.Co. Station	411
	Tacotna Settlement	427
	Big Creek R.H.	441
	Half Way R.H.	454
	Lincoln Creek R.H.	460
	Moore Creek R.H.	476
	Ruby Road House	487
	Bonanza Creek R.H.	501
	Iditarod (Settlement)	520